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SAFETY AND EFFICACY OF TRANSRADIAL APPROACH FOR CORONARY ANGIOGRAPHY AND INTERVENTION IN THE ELDERLY: A SYSTEMIC REVIEW AND META-ANALYSIS

Poster Contributions
Hall C
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Authors: *Sami M. Alnasser, Akshay Bagai, Sanjit Jolly, Warren Cantor, Olivier Bertrand, Asim Cheema, St Michael's Hospital, Toronto, Canada, Hamilton Health Science, Hamilton, Canada*

Background: Transradial approach (TR) for coronary angiography and intervention (CA/PCI) is shown to offer significant advantages compared to transfemoral approach (TF) in general population. However, limited information is available for the safety and efficacy of TR in the elderly.

Methods: A comprehensive literature search of studies comparing TR and TF in the elderly was performed and meta-analysis conducted using Revman software. The primary end points were blood transfusion and a composite of vascular complications. The secondary endpoints included access site cross over, myocardial infarction (MI), stroke and in-hospital mortality.

Results: A total of 235 studies were reviewed and 9 included in the final analysis. Clinical outcomes of 2315 patients (2 randomized and 7 observational) were compared between TR (n=684, 43%) and TF (n=1631, 57%). The results (figure 1) showed that TR was associated with a lower rate for blood transfusion (OR 0.35, p=0.03) and vascular complications (OR 0.20, p<0.0001). The access site crossover was higher for TR (10% vs. 3.1%, OR 4.74, p=0.003) with no difference in the rate of MI, stroke and death between the two groups. The findings were unchanged when analysis was limited to randomized studies.

Conclusions: TR for CA/PCI in the elderly significantly reduces blood transfusion and vascular complications compared to TF with a higher but acceptable rate of access site cross over. The risk of MI, stroke and in-hospital death are similar for the two approaches.